

Applicant: T Watanabe
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Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

Claims 1-26 (Canceled)

27. (New) A color solid-state imaging apparatus in which a green color (G), a red color (R) and a blue color (B) in a Bayer array are respectively provided in a pixel unit on a plurality of pixel devices provided in an imaging area;

wherein the color solid-state imaging apparatus is configured to perform at least one of a reading operation in a 1/2-decimated manner for 1/2 of the pixels of the imaging area, a reading operation in a 1/4-decimated manner for 1/4 of the pixels of the imaging area, a reading operation in a 1/8-decimated manner for 1/8 of the pixels of the imaging area, a reading operation in a 1/16-decimated manner for 1/16 of the pixels of the imaging area and a reading operation in a 1/18-decimated manner for 1/18 of the pixels of the imaging area so that a G signal has a first spatial resolution with a shape of a first square and each of an R signal and an B signal has a second resolution with a shape of a second square lying within and touching four sides of the first square.

28. (New) A color solid-state imaging apparatus according to claim 1, wherein:

the reading operation in the 1/2-decimated manner is performed so that the first spatial resolution is up to 1/2 of the Nyquist threshold value in both horizontal and vertical directions

and up to $1/2$ of the Nyquist threshold value in both diagonal directions, and the second spatial resolution is up to $1/2$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/4$ of the Nyquist threshold value in both diagonal directions,

the reading operation in the $1/4$ -decimated manner is performed so that the first spatial resolution is up to $1/2$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/4$ of the Nyquist threshold value in both diagonal directions, and the second spatial resolution is up to $1/4$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/4$ of the Nyquist threshold value in both diagonal directions,

the reading operation in the $1/8$ -decimated manner is performed so that the first spatial resolution is up to $1/4$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/4$ of the Nyquist threshold value in both diagonal directions, and the second spatial resolution is up to $1/4$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/8$ of the Nyquist threshold value in both diagonal directions,

the reading operation in the $1/16$ -decimated manner is performed so that the first spatial resolution is up to $1/4$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/8$ of the Nyquist threshold value in both diagonal directions, and the second spatial resolution is up to $1/8$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/8$ of the Nyquist threshold value in both diagonal directions,

the reading operation in the $1/18$ -decimated manner is performed so that the first spatial resolution is up to $1/6$ of the Nyquist threshold value in both horizontal and vertical directions and up to $1/6$ of the Nyquist threshold value in both diagonal directions, and the second spatial

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resolution is up to $1/6$ of the Nyquist threshold value in both horizontal and vertical directions
and up to $1/12$ of the Nyquist threshold value in both diagonal directions.